

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

ACCOUNTING SYSTEM
OF F.G.PUBLIC SCHOOL
PANO AQIL CANTT

BY



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&
MUHAMMAD ALI WASAN

A REPORT IS SUBMITTED TO
QUAID-I-AZAM UNIVERSITY ISLAMABAD
AS A PARTIAL FULFILLAMET OF THE
REQUIREMENT OF THE POST GRADUATE
DIPLOMA IN COMPUTER SCIENCE

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ACCOUNTING SYSTEM
OF F.G.PUBLIC SCHOOL
PANO AQIL CANTT

DESIGNED AND DEVELOPED

BY

MR MUNIR HUSSAIN
&
MUHAMMAD ALI WASAN

*IN THE NAME OF
ALLAH
THE MOST MERCIFULL
AND BENEFECIAL*



TO
OUR PARENTS
WHO ENTHUSIASTICALLY
SUPPORTED OUR EDUCATIONAL
GOALS



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PROJECT BRIEF

PROJECT TITLE	ACCOUNTIN SYSTEM OF F.G, PUBLIC SCHOOL PANO AQIL CANTT
DEPARTMENT	COMPUTER CENTRE QUAID-I-AZAM UNIVERSITY ISLAMABAD
SUPERVISED BY	MR ABDUAL SUBHAN ASSITANT PROGRAMER COMPUTER CENTRE Q.A.U ISLAMABAD
UNDERTAKEN BY	MR MUNIR HUSSAIN & MUHAMMAD ALI WASAN
SOFTWARE USED	ORACLE &DEV2000
ENVIRONMENT USED	WINDOW 98
SYSTEM USED	PENTUM 500MHZ

FINAL APPROVAL

THIS IS CERTIFY THAT WE HAVE READ THIS PROJECT REPORT SUBMITTED BY MR MUNIR HUSSAIN & MUHAMMAD ALI WASAN AND FOUND IT SUFFICIENT TO WARRANT IT ACCEPTANCE BY THE QUAID-I-AZAM UNIVERSITY ISLAMABAD FOR THE POST GRADUATE DIPLOMA IN COMPUTER SCIENCE

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ACKNOWLEDGEMENT

OUR DEEPEST GRATITUDE TO ALLAH ALMIGHTY WHO BLESSES THE MANKIND WITH INTELLIGENCE AND ENABLED US TO COMPLETE THIS PROJECT

WE FEEL GREAT DEPTH OF OBLIGATION FOR MY LOVING PARENTS WHO'S PRAYERS HAVE ENABLED US TO REACH THIS STAGE.

WE EXPRESS PERFOUND GRADUATE TO OUR RESPECTABLE TEACHER AND SUPERVISER MR ABDUAL SUBHAN ASSITENT PROGRAMER FOR HIS INVALUABLE GUIDENCE AND CO-OPERATION DURING OUR PROJECT.

WE WOULD LIKE TO THANKS ALL OUR CLASS FELLOW AND STAFF OF THE COMPUTER CENTRE INDIVIDUALLY FOR THEIR ENCOUREGEMENT MORAL SUPPORT AND KIND CO-OPERATION DURING OUR STAY AT THE UNIVERSITY.

DATE 23-05-2002

MUNIR HUSSAIN
MUHAMMAD ALI WASAN

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CHAPTER N O: 1

INTRODUCTION

INTRODUCTION OF THE ORGANIZATION

F.G Public School Panu Aqil Cantt is an educational institution. It is a unit of Federal Government educational institution (Cantt and garrisons) FGEI(C/G) is an attached department of Ministry of Defense. This department is responsible to promote the education in cantt and garrisons areas through F.G educational institutions. The F.G Public School is one of them, which was established in 1988 in newly established pano Aqil Cantt. It started working during partial settle of the units to provide the educational facility to the children of troops as well as to the local community around the cantt

1.1 THE IMPACT FOR CHANGE.

Personally accounting system is working manually and related staff has to carry out a huge calculation, which is cumbersome, time consuming and in economical and management has to face tremendous hard skips to conduct the system. On the other hand, recent technological development and its wide range of application made computer a vital tool in the computation field. The computer job is fast, accurate and reliable. So the need for a computerized system is evident to enable quick computation access and retrieval of information.

1.2 PROBLEM SCOPE

The project aim is to develop and implement a computerized accounting system. The system will operate in multi-user environment and will provide up-to-date information about the dues deposited by the students to the school and will also provide up-to-date information about the income and expenditure.

1.3: OBJECTIVE THE PROJECT

The purpose of this project is to develop a software package to fulfill the requirement of the accounting of the school .the major objectives of the purposed system are as fellows

- 1-To reduce the load of maintaining huge registers, by computerizing the entire process.
- 2- To make income and expenditure data more readily available.
- 3- To make data more reliable and consistent.
- 4- To make accurate and up-to-date information available on demand at any time.

- 5- To make data more secure and controlled.
- 6- To provide user-friendly interface, so that the user will quickly become familiar with the application software

1.6: PHASES OF THE PROJECT

The project is divided into a number of phases. A brief description of each phase is given below.

1.6.1 PRELIMINARY INVESTIGATION AND SYSTEM ANALYSIS

The initial phase of the system life cycle is its study and analysis. The initial phase involving background work that is necessary before any further action. In this context another conducted system of the account.

1.6.2: REQUIREMENT ANALYSIS

The author with the help of the management of account produce, software specifications at the end of the analysis task. These requirements must be catered by the system developed these were presented to the project co-ordinator MR. ABDUL SOBHAN who approved to proceed with design phase.

1.6.3: SYSTEM DESIGN.

The proposed system was designed using a top down approach. The aim was to start with a broad view of the problem and attempt to define what must be done, the detail of how the solution is to be implemented were left until later. By concentrating on the problem first and leaving the technical detail until last, these details were planned in the context of a broad general solution.

1.6.4: SYSTEM SPECIFICATION.

After outlining at a block level the major components of the system to be implemented, and showing how the components would fit together the format of each was defined, specification and information flow diagrams for each of the programs were developed, the objective to prepare a complete plan with detail so that programming could be started.

IBM compatible 486-based machine was used for the development of the software using Oracle. A considerable amount of time was spent learning the relational database.

Oracle is chosen because it provides many features e.g. compatibility, portability, cost-effectiveness etc.

1.6.5: SYSTEM DEVELOPMENT

During the development phase the software developer describe how data structure and software architecture are to be designed .how the procedural detail are to be implemented .How the design will be translated in to programming language and how the testing will be performed. In program designing top-down coding was Performed as it allowed or preliminary version of the system.

1.6.5: SYSTEM IMPLEMENTATION

Implementation is the final phase in the system development life cycle. It starts at the beginning of the software development phase with a plan known as implementation plan. During this phase the developed system is put in to the actual operation.



CHAPTER NO: 2

THE EXISTING SYSTEM

2.1: INTRODUCTION

The process of studying the existing system to see as to how it operates and where improvement can be made. It is possible to present a solution of the problem faced by a particular system only often through knowledge of the working of the existing system acquired. Incorrect or incomplete understanding of the existing system can lead to design error in the new system as a result of which the newly developed system may not be able to present a solution of the already present in the system. Thus only after the existing system is fully understood. It is possible to analyze it and assemble recommendation for system design. Therefore the study of the working of the system, the drawbacks and the limitation of the existing system is one of the most important tasks of an analysis.

2.2 THE EXISTING SYSTEM

The account office is the heart of the administration part. It controls the financial discipline of the school. It maintains the accounts of expenditure and a/c of income. All transactions made through the vouchers. There are two types of vouchers

1- Receipt voucher 2- Payment voucher

1-RECEIPT VOUCHER

There are two types of receipt vouchers

1-Bank receipt voucher

2- Fee receipt voucher

2- PAYMENT VOUCHER

All payments are made through payment vouchers. It consists of check no bank name date amount, payment party name etc.

3-CASH BOOK

This book is used to keep the record of the income and expenditure in all accounts heads. There are two sides of cashbook

1-Debits side 2- credit side

4-FEE REGISTER

Fee register has various columns like Admission fee, Slc fee, Tuition fee, science fee etc.

4-FUNDS REGISTER

Fund register has columns like sports fund, student fund, furniture fund, building fund, regional development fund, exam fund, science fund etc.

5-LEDGER

It is the main book of the account. All transaction are recorded in the cash book and are posted monthly in to the appropriate account and ledger. credit and debit side of each book are interred in to credit and debit side of the ledger.

2.3 DRAWBACK OF THE EXISTING SYSTEM

Drawbacks of the system are ones, which give rise to the need of improving the existing system and eradicating these problems from the system.

Following are the drawbacks of the existing system

1-All students dues information are maintained in the huge register, so in order to search for the record of a particular student, the registers are searched manually which is a time consuming process.

2-All calculations of students' dues are done manually.

3-Report sent to the higher authority are prepared manually.

4-There is a lot of information redundancy in the existing system.

5- As all the data is stored in the registers with no backup, so if these registers are damaged or lost accidently, then it will create a very serious problem.

6-To keeps the record of the all information; a large volume of stationery is required.

7-As the whole process is carried out manually the chances of errors are two high like data missing, error in calculations etc.

2.4 FINDING AND RECOMMENDATIONS

The system study revealed a distinct need for an automated accounting system. The benefits of the improvements suggested will certainly exceed both development and operating costs. However it is recommended that an automated system will be developed using computer equipment and to support the data communication activities the software should be of such kind that it could provide easy integration of old modules of a large System. To cater for these requirements a multi-user operating system along with a database system, which supports a multi-user, environment is required.

2.5 EXPECTED QUALITIES

(1) RELIABILITY

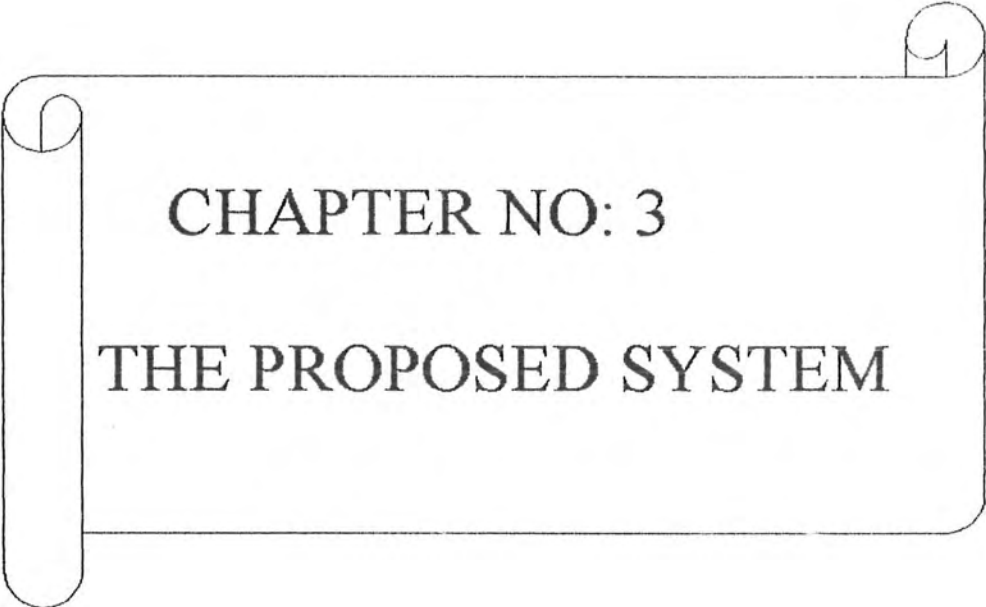
The system must contain data integrity. The field must be protected from inconsistent or lost data, resulting from failure in the application.

(2) ADAPTABILITY

The system should be flexible enough to manage future enhancement. Similarly modular approach should be adopted for easy maintenance of the system. The system should allow the user to share the frequently used program and data.

(3) PERFORMANCE

The system should take less time to respond to a particular query or to generate a particular report. It should have maximum throughput. The system should ensure that data is accurate and consistent.



CHAPTER NO: 3

THE PROPOSED SYSTEM

3.1 INTRODUCTION

Automation means to change a manual to computer Based system. After analyzing the problem in the existing system a, computerized system is proposed.

The element of a computer-based system is hardware, software, and database documentation and procedures. It is hoped that this approach will meet nearly all Possible requirement of accounting system of the stated school.

3.2 FEATURE OF THE PROPOSED SYSTEM

For a successful system it is most important that it fulfill the user requirements. Mostly projects fail because of the unreasonable expectations are attached to them, therefore the user's expectation should clearly be defined. The main goal of this project is to design and implement complete computerized system that fulfill all the requirements of the accounting system of the school.

Following are the features of the proposed system.

- 1- Be more efficient then existing system
- 2- Fast and easy access to the required information
- 3- Easy to use
- 4- Ensure security and protection of the data.
- 5- Is a system having data integrity and data consistency.

3.3 OBJECTIVE OF PROPOSED SYSTEM

It is important to establish some objectives that proposed system should meet. The proposed computer inventory control system has an edge over the present system in context of the following aspects.

3.3.1 EASY OF USE

The proposed system will be easy to use which is one of the main objectives

of the proposed system. It will be menu driven and will provide sophisticated user interface by displaying appropriate message at each step.

3.3.2 ACCURACY

The proposed system will allow greater accuracy and will prevent the user from entering duplicate record as in the manual system.

3.3.3 CODES

Codes will be assigned to reduce the storage and number of typing strokes used to input data codes are assigned. Keeping in mind the maximum range of value and types of information to eliminate any error. Codes will be small and easy.

3.3.4 EFFICENCY

The proposed system will be error free out puts should be satisfactory. It would be done by some validation checks at all the data entry fields e.g. checks for unique and not-null primary key and validating code entry

3.3.5 FLEXIBILITY

The new proposed system will be much more flexible in relation and modification of transaction.

3.3.6 SPEED

The manual system is slow and cumbersome because calculations for each and every thing are hard and minor error in codes entry may results in a delay of hour. The new proposed system will allow user to create delete, modify and retrieve information with greater speed .

3.3.7 USER FRIENDLY

Proposed system is user friendly. It would provide online source to the user. It would be menu driven and give proper messages; data entry and modification process would be in friendly environment.

3.3.8 PRINTED INFORMATION

The proposed system will allow the user to print the described information

very easily .The proposed system will provide large Variety of reports that will be discussed in next chapter.

3.3.9 REMOVAL OF REDUNDANCY

The proposed system will minimize the redundancy of data. Which frequently occurs in non-computerized system.

3.3.10 UP-TO-DATE REPORTS

The proposed system will be able to generate up-to-date reports for the management. All transactions of the office can be summarized by these reports.

3.4 SOFTWARE SELECTION

Software selection is very impotent and it depends upon the problem you are going to solve. Different languages and packages provides different features that handled strongly in their own. After a lot of consideration “ dev/2000” was selected for the proposed system.

3.5 FEATURE PROVIDED BY THE DEV/2000

Important features of dev/2000 are given below.

3.5.1 PORTABLITY

Dev/2000 software is ported to work under different operating system. Application developed for developer/2000 can be ported to many operating systems with a little or no modifications.

3.5.2 SECURITY AND CONTROL

Dev/2000 allows controlled access to the database. It protects data from unauthorized access by providing password facility.

3.5.3 INTEGRITY AND CONSISTENCY

In consistency b/w two entities that tend to represent the same effect is an

example of lack of integrity. Dev/2000 provides this ensuring that data in database is inconsistent.

3.5.4 COMPACTIBILITY

Dev/2000 is compactable with industry and commercial standards including most operating system. Application developed for dev/2000 can be used virtually on any system little or no-modification.

3.5.5 SINGLE USER AS WELL AS MULTI-USER

Dev/2000 supports not only single user but also multi-user systems. Which allow users to share frequently used program and data.

3.5.6 CONNECTIVITY

Dev/2000 allows different types of computers and operating system to share information access network.

3.5.7 HIGH AVAILBILIITY

At some sites dev/2000 works hour per day with no down time to limit database throughput.

3.5.8 CLIENT/SERVER ENVIRONMENT

To take full advantage of given computer system as networks dev/2000 allows processing to split the database server and client/server application.

A decorative scroll-like frame with a vertical strip on the left side and a small circular element at the top right corner. The text is centered within the frame.

CHAPTER NO: 4

SYSTEM DESIGN

4.1 INTRODUCTION

Design phase is the realization of the proposal developed in the Requirement Analysis phase of system Analysis. For convenience; it has been divided into two phases, the logical Design phase and the physical Design. This chapter is concerned with the details of the logical and physical database design.

4.2 LOGICAL DATABASE DESIGN PHASE

This phase simplifies the approach to design large relational database by reducing the number of data dependencies that need to be analyzed.

4.2.1 OUTPUT DESIGN

The output design constitutes an important part of any information system. The output may be in the form of queries and reports. Queries are usually screen oriented and reports are usually produced on the printer. All this should be finalized, before the file structure is considered. The output for the proposed system is identified below.

4.2.1.1 QUERY GENERATION

The following queries will be required

- To know the fee deposited in a particular month by the student.
- To know the total fee deposited by a student.
- To know the total tuition fee deposited by a student.
- To get the complete information about income.
- To get the necessary information of challan form on a particular date.
- To know add: fee deposited between two dates.
- To know contingency expenses of the particular type.

4.2.1.2 REPORT GENERATION

The following reports will be produced by the system.

- Monthly total fee received reports.
- Annually total fee received reports.
- Grant detail report.
- Donation detail report.
- Monthly salary report.

Contingences expenses report

4.2.2 INPUT DESIGN

Input design is as much important for any information system as its out put design. It determines the data that will be used for the processing of the out put. The generation of either correct, or erroneous information is also determined by it. Thus, it is very important to carefully plan the input design. Following are the mechanisms adapted, to make the input design desirable.

4. 2.2.1 CODE DESIGNING

To reduce redundancy and make data entry desirable mnemonic coding scheme has been adopted. This not only preserves disk space, but also reduces the probability of entering incorrect information.

4.2.2.2 INPUT FORM

Various input forms have been designed for correct entry of information into the database. Attempts have been made to model the forms that they resemble the existing forms.

Application Forms

The different forms devised are as fallows

INCOME FORM
GRANT FORM
DONATION FORM
DUES FORM
STUDENT FORM
CHALLEN FORM
PAYMENT FORM
DEPOSIT FORM
EMPLOYEE FORM
EMPLOYEE DETAIL FPRM
SALARY FORM
CONTIGENEOUS FORM
OTHER- EXP- FORM.

4.2.2.3 CHOICE LIST (LOV)

A choice list is used, when a particular field has more than one value. The user needs only to click on the required, which is then displayed in the corresponding field. This approach is adopted to avoid confusion in data entry for the fields, which have fixed values.

4.2.2.4 PASSWORD

The password system will be implemented for security purposes. Whenever a user will log-in, have to provide his identification, by typing his password, such users are called registered users. Then only he will be able to carry out the desired action.

4.3 PHYSICALL DESIGN DATA

It is the process of selecting particular storage structures and access paths for the database files to achieve good performance.

4.3.1 TABLE DESIGNING

The tables should be designed in such manner to eliminate data redundancy, reduce insert and update anomalies data entry and provide for fast retrieval of information. The relationships that exists, between various files is shown in extended BACHMAN DIAGRAM attached to the appendix.

4.3.2 DATA TYPE DESCRIPTION

Data in an oracle database is stored in tables that contain columns or fields. Each field is reserved for a particular type of data that is decided upon when the table is created. An over view of the structure or rows in each table is provided here.

CHAR: character data consists of characters digits and special characters. The maximum field size is 255 characters.

DATA: Data field can contain valid data format i.e. DD-MM-YY.

NUMBER: Number data can contain 0 through 9, and an optional negative sign.

VARCHAR: It stores characters types data but difference is that it stores only that number of characters we have entered. For convenience, the following abbreviations to denote the above mentioned data types is used.

N= NUMBER

C = CHAR

DT = DATE

V2 = VAR CHAR2

The layout of the row for each table is described by the following formats.

TABLE NAME: Specifies the name of the table.

COLUMN DESC Specifies the name, type, length and description of the column.

NOT NULL: Specifies whether the column can remain empty for a particular row or data must be present in it to insert the row into the table.

TYPE: Specifies the type and length of that field.

THE SPECIFICATION OF DIFFERENT TABLES AND DESCRIPTION ARE AS FOLLOWS

TABLE NAME: INCOME

Purpose: The purpose of this table is to keep the necessary information of a Income.

Key: IN_ID

COLUMN DESCRIPTION

Name	Null?	Type
IN_ID	NOT NULL	NUMBER (2)
TYPE		CHAR (20)

SAMPLE DATA

IN_ID	TYPE
1	GRANT
2	DONATION
3	DUESS

TABLE NAME: ACCOUNT;

PURPOSE: The purpose of this table is to provide the information of the accounts of the school.

Key: ACC_ID

COLUMN DESCRIPTION

Name	Null?	Type
ACC_ID	NOT NULL	NUMBER (4)
ACC_NO		NUMBER (8)
TYPE		CHAR (20)
BANK		CHAR (20)

SAMPLE DATA

ACC_ID	ACC_NO	TYPE	BANK
1	23456	GOVT FUND	HABIB
2	23457	STUDENT FUND	HABIB
3	23458	DONATION	HABIB

Table Name: GRANT

Purpose: The purpose of this table is to keep the necessary information of a GRANT.

Key: GR_ID

COLUMN DESCRIPTION

Name	Null?	Type
IN_ID		NUMBER (2)
GR_ID	NOT NULL	NUMBER (2)
TYPE		CHAR (20)

SAMPLE DATA

IN_ID	GR_ID	TYPE
1	1	GOVERNMENT
1	2	DIRECTORATE
1	3	REGIONAL OFFICE

Table Name: GRANT DETAIL

Purpose: The purpose of this table is to keep the necessary information of a Grant detail.

Key: GR_ID

COLUMN DESCRIPTION

Name	Null?	Type
SRN	NOT NULL	NUMBER (2)
GR_ID		NUMBER (2)
RE_LETT_NO		CHAR (10)
DT		DATE
AMT		NUMBER (6)
CHECK_NO		NUMBER (8)
BANK		CHAR (10)
AUTHORITY		CHAR (20)
ACC_NO		NUMBER (8)

SAMPLE DATA

SRN	GR_ID	RE_LET_NO	DT	AMT	CH_NO	BANK	AUTH	ACC_NO
1	1	1235	01-FEB-98	120000	5432	HABIB	GOVT	2987
2	1	5432	04-FEB-99	500000	76543	HABIB	GOVT	5643
6	2	5678	01-JUL-98	30000	76589	NBP	DIRECTOR	4321
11	3	87699	01-JUL-98	20000	87659	MCB	GSO-1	7600

Table Name DONATION

Purpose: The purpose of this table is to keep the necessary information of a DONATION.

Key: DO_ID

COLUMN DESCRIPTION

Name	Null?	Type
-----	-----	-----
IN_ID		NUMBER (2)
DO_ID	NOT NULL	NUMBER (2)
TYPE		CHAR (20)

SAMPLE DATA

IN_ID	DO_ID	TYPE
2	1	FINNANCIAL
2	2	PHYSICAL

Table Name DONATION_DETAIL

Purpose: The purpose of this table is to keep the necessary information of a Donation detail.

Key: SRN

COLUMN DESCRIPTION

Name	Null?	Type
SRN	NOT NULL	NUMBER (4)
DO_ID		NUMBER (2)
AUTHORITY		CHAR (20)
DT		DATE
AMT		NUMBER (6)
CHECK_NO		NUMBER (8)
CHECK_DT		DATE
BANK		CHAR (10)
ACC_NO		NUMBER (8)
TYPE		CHAR (10)

SAMPLE DATA

SRN	DO_ID	AUTHORITY	DT	AMT	CHECK_NO	CHECK_DT	BANK	ACC_NO	TYPE
1	1	MISS SHAZIA	01-DEC-98	25000	12345	01-DEC-98	UNION BANK	43209	FINAC
2	1	MR TAHIR HUSSAIN	12-NOV-98	40000	432167	12-NOV-98	ASKARI	765000	FINAN
3	1	MR TANVEER HUSSAIN	23-OCT-98	45000	32111	23-OCT-98	NATIONAL	43217	FINANC
4	1	MISS ANELA	03-FEB-99	4500	34567	03-FEB-99	FIRST WOME	32100	FINANC
5	2	MISS FERZANA	12-DEC-98	0	0	23-DEC-98	0	0	COMPU IER

Table name STUDENT

Purpose: The purpose of this table is to keep the necessary information of a Student.

Key: REG_NO

COLUMN DESCRIPTION

Name	Null?	Type
REG_NO	NOT NULL	NUMBER (4)
NAME		CHAR (20)
CLASS		CHAR (10)
SECTION		CHAR (10)
ROLL_NO		NUMBER (3)

SAMPLE DATA

REG NO	NAME	CLASS	SECTION	ROLL NO
101	MUNIR HUSSAIN	10 TH	A	1
102	TAHIR HUSSAIN	10 TH	A	2
103	TANVEER HUSSAIN	10 TH	A	3
104	ZUBAIR HUSSAIN	10 TH	A	4
105	UMAIR HUSSAIN	10 TH	A	5
106	SOHAIL IMRAN	10 TH	A	6
107	EJAZ AHMAD	10 TH	A	7
108	RAIZ AHMAD	10 TH	A	8
109	FAIZ AHMAD	10 TH	A	9
110	KHURAM SHAZAD	10 TH	A	10
111	ALI AHMAD	9 TH	B	1
112	WALI AHMAD	9 TH	B	2
113	SAMEE ULLAH	9 TH	B	3
114	MUSTAJAB AHMAD	9 TH	B	4
115	EBTASAM GUL	9 TH	B	5
116	HAMAD NOOR	9 TH	B	6
117	RAFIQ AHMAD	9 TH	B	7
118	FAROOQ KHAN	9 TH	B	8
119	FRAZ EJAZ	9 TH	B	9
120	KHUDA BUSHK	9 TH	B	10
121	ALLAH BUSHK	8 TH	C	1

Table Name: CHALLEN

Purpose: The purpose of this table is to keep the necessary information of a challen.

Key: CHL_NO

COLUMN DESCRIPTION

Name	Null?	Type
REG_NO		NUMBER (4)
CHL_NO	NOT NULL	NUMBER (6)
DT		DATE

SAMOLE DATA

REG_NO	CHL_NO	DT
101	1	01-JAN-02
102	2	01-JAN-02
103	3	01-JAN-02
104	4	01-JAN-02
105	5	01-JAN-02
106	6	01-JAN-02
107	7	01-JAN-02
108	8	01-JAN-02
109	9	01-JAN-02
110	10	01-JAN-02
111	11	01-JAN-02
112	12	01-JAN-02
113	13	01-JAN-02
114	14	01-JAN-02
115	15	01-JAN-02
116	16	01-JAN-02
117	17	01-JAN-02
118	18	01-JAN-02
119	19	01-JAN-02
120	20	01-JAN-02
121	21	01-JAN-02
122	22	01-JAN-02
123	23	01-JAN-02
124	24	01-JAN-02
125	25	01-JAN-02

Table name DUESS

Purpose: The purpose of this table is to keep the necessary information of a dues.

Key: DU_ID

COLUMN DESCRIPTION

Name	Null?	Type
IN_ID		NUMBER (2)
DU_ID	NOT NULL	NUMBER (2)
TYPE		CHAR (20)
AMT		NUMBER (6)

SAMPLE DATA

IN_ID	DU_ID	TYPE	AMT
3	1	ADMISSION FEE	150
3	2	TUTION FEE	200
3	3	SLC FEE	100
3	4	SCIENCE FEE	50
3	5	STUDENT FUND	50
3	6	SPORT FUND	50
3	7	BUILDING FUND	50
3	8	LIBRARY FUND	40
3	9	SCIENCE FUND	100
3	10	EXAM FUND	250
3	11	ABSENT FINE	10
3	12	LATE PAYMENT	50
3	13	FURNITURE FUND	100

Table Name: DEPOSIT;

Purpose: The purpose of this table is to keep the necessary information of a deposit in the various accounts.

Key: Vr_No

COLUMN DESCRIPTION

Name	Null?	Type
SRN		NUMBER (6)
IN_ID		NUMBER (2)
AMT		NUMBER (6)
V_NO	NOT NULL	NUMBER (6)
ACC_ID		NUMBER (8)
BANK		CHAR (10)
DT		DATE
REMARKS		CHAR (20)

SAMPLE DATA

SRN	IN_ID	AMT	V_NO	ACC_ID	BANK	DATE	REMARKS
1	1	120000	11223	1	HABIB	24-FEB-98	GOVT GRANT
2	1	500000	11224	1	HABIB	23-FEB-99	GOVT GRANT
6	1	30000	11239	1	HABIB	18-JUL-98	DIRT GRANT
7	1	500000	11243	1	HABIB	24-JUL-99	DIRT GRANT
8	1	500000	11247	1	HABIB	24-JUL-00	DIRT GRANT
12	1	20000	11258	1	HABIB	23-JUL-98	GSO -1
13	1	50000	11264	1	HABIB	24-DEC-99	GSO-1
17	2	25000	11234	3	HABIB	24-DEC-98	MRS SHAZIA
18	2	40000	11238	3	HABIB	22-NOV-98	MR TAHIR
19	2	45000	11242	3	HABIB	22-OCT-98	MR TANVEER
20	2	4500	11244	3	HABIB	22-FEB-99	MISS ANELA
21	3	14580	117888	2	HABIB	12-JAN-02	DUESS

Table Name: EXPENCES;

Purpose: The purpose of this table is to keep the necessary information of a expenses of the school.

Key: EXP_ID

COLUMN DESCRIPTION

Name	Null?	Type
SRN		NUMBER (4)
EXP_ID	NOT NULL	NUMBER (4)
TYPE		CHAR (20)

SAMPLE DATA

SRN	EXP_ID	TYPE
1	1	SALARY
2	2	CONTEGENT
3	3	OTH_EXP

Table Name: EMPLOYEE;

Purpose: The purpose of this table is to keep the necessary information of a employee of the school.

Key: EMP_ID

COLUMN DESCRIPTION

Name	Null?	Type
SRN		NUMBER (4)
SAL_ID		NUMBER (4)
EMP_ID	NOT NULL	NUMBER (4)
NAME		CHAR (20)
DESG		CHAR (10)
TYPE		CHAR (20)

SAMPLE DATA

SRN	SAL_ID	EMP_ID	NAME	DESG	TYPE
1	1	1	CH ABDUL KHALIQ	PRINCIPAL	PERMANENT
2	2	2	KHAN BALOCH	VOICE PRIN	PERMANENT
3	3	3	GHULAM HUSSAIN	T.G.T	PERMANENT
4	3	4	CH ARSHAD	T.G.T	PERMANENT
5	3	5	CH YOUSF	T.G.T	PERMANENT
6	3	6	LATIF UR RAHMAN	T.G.T	PERMANENT
7	3	7	ZAFER HUSSAN	T.G.T	PERMANENT
8	3	8	AZIZ UR RAHMAN	T.G.T	PERMANENT
9	3	9	ABDUL RASHEED	T.G.T	PERMANENT
10	3	10	LAQIT GOJAR	T.G.T	PERMANENT
11	3	11	MUNIR HUSSAIN	T.G.T	PERMANENT
12	4	12	ABDUL RAUF	T.U.G.T	PERMANENT
13	4	13	ABDUL KHALIQ	T.U.G.T	PERMANENT
14	4	14	SHK ZAHEER	T.U.G.T	PERMANENT
15	4	15	ASAD KHAN	T.U.G.T	PERMANENT
16	4	16	ZUBAIR AHMAD	T.U.G.T	PERMANENT
17	4	17	REFEEQ	T.U.G.T	PERMANENT
18	4	18	TARIQ MAHMOOD	T.U.G.T	PERMANENT
19	5	19	MUHAMMAD HANIF	M.T.T	PERMANENT
20	5	20	MAHBOOB AHMAD	M.T.T	PERMANENT

Table Name: EMP_DETAIL;

Purpose: The purpose of this table is to keep the necessary information of a emp_detail such as basic pay, house rent, medical allow,conv allow etc.

Key: SRN

COLUMN DESCRIPTION

Name	Null?	Type
SRN	NOT NULL	NUMBER (4)
EMP_ID		NUMBER (4)
BASIC_PAY		NUMBER (6)
HOUSE_RENT		NUMBER (4)
MA_ALLOW		NUMBER (3)
CONV_ALLOW		NUMBER (3)
SPE_ALLOW		NUMBER (4)
OTH_ALLOW		NUMBER (4)

SAMPLE DATA

SRN	EMP_ID	BASIC_PAY	HOUSE_RENT	MA_ALLOW	CONV_ALLOW	SPE_ALLOW	OTH_ALLOW	TOT
1	1	12450	1250	640	640	0	0	14980
2	2	9850	1250	640	640	0	0	12380
3	3	8450	844	640	640	0	0	10574
4	4	8210	844	640	340	0	0	10034
5	5	6775	844	640	340	0	0	8599
6	6	6775	844	640	340	0	0	8599
7	7	6231	844	640	340	0	0	8055
8	8	6450	844	640	640	0	0	8574
9	9	6450	844	640	640	0	0	8574
10	10	6450	844	640	640	200	0	8774
11	11	6450	844	640	640	200	1500	10274
12	12	4550	570	300	130	0	0	5550
13	13	4990	570	300	130	0	0	5990
14	14	5750	570	300	130	0	0	6750
15	15	3980	570	300	130	0	0	4980
16	16	3775	570	300	130	0	0	4775
17	17	4660	570	300	130	0	0	5660
18	18	3975	570	300	130	0	0	4975
19	19	3330	554	130	96	0	0	4110
20	20	3490	554	130	96	0	0	4270

Table Name SALERY;

Purpose: The purpose of this table is to keep the necessary information of a salary either it is the salary of the permanent or temporary employee.

Key: SAL_ID

COLUMN DESCRIPTION

Name	Null?	Type
SRN		NUMBER (4)
EXP_ID		NUMBER (4)
SAL_ID	NOT NULL	NUMBER (4)
TYPE		CHAR (20)

SAMPLE DATA

SRN	EXP_ID	SAL_ID	TYPE
1	1	1	PRINCIPAL
2	1	2	VICE PRINCIPAL
3	1	3	T.G.T
4	1	4	T.U.G.T
5	1	5	M.T.T
6	1	6	D.M
7	1	7	P.T.I
8	1	8	LIBRERARIEN
9	1	9	LIB ASSTT /
10	1	10	LAB ASSTT
11	1	11	MUCIC TEACHER
12	1	12	ACCOUNTENT
13	1	13	U.D.C
14	1	14	L.D.C
15	1	15	PEON
16	1	16	CHOKEDAR
17	1	17	MALI

Table Name: SALARY_DETAIL;

Purpose: The purpose of this table is to keep the necessary information of a salary detail.

Key: SRN

COLUMN DESCRIPTION

Name	Null?	Type
SRN	NOT NULL	NUMBER (1)
SAL_ID		NUMBER (4)
EMP_ID		NUMBER (4)
CHECK_NO		NUMBER (8)
ACC_NO		NUMBER (8)
BANK		CHAR (20)
AMT		NUMBER (8)
DT		DATE
ACC_ID		NUMBER (4)

SAMPLE DATA

SRN	SAL_ID	EMP_ID	CHK_NO	AC_NO	BANK	AMT	DT	AC_ID
1	1	1	435678	12345	HABIB	13150	29-DEC-99	1
2	2	2	234578	123456	HABIB	10550	29-DEC-99	1
3	3	3	456778	123457	HABIB	9764	29-DEC-99	1
4	3	4	345677	123458	HABIB	9224	29-DEC-99	1
12	4	12	785743	6785634	HABIB	4905	29-DEC-99	1
13	4	13	89532	344556	HABIB	5345	29-DEC-99	1
19	5	19	54221	8656755	MCB	3685	29-DEC-99	1
20	5	20	6512	12776	MCB	3845	29-DEC-99	1
25	6	25	234556	32424	NBP	4855	29-DEC-99	1
26	7	26	234454	32435	NBP	6869	29-DEC-99	1
27	8	27	2344451	32455	NBP	6669	29-DEC-99	1

Table Name: CONTEGENT_EXP;

Purpose: The purpose of this table is to keep the necessary information of a contegent_exp.

Key: CON_ID

COLUMN DESCRIPTION

Name	Null?	Type
SRN		NUMBER (4)
EXP_ID		NUMBER (4)
CON_ID	NOT NULL	NUMBER (4)
TYPE		CHAR (20)

SAMPLE DATA

SRN	EXP_ID	CON_ID	TYPE
1	2	1	ELECTRICTY
2	2	2	GAS CHARGES
3	2	3	TELE PHONE CHARGES
4	2	4	NEWS PAPER
5	2	5	WATER SUPPLY
6	2	6	ICE CHARGES
7	2	7	COAL CHARGES
8	2	8	STATIONERY CHARGES
9	2	9	BUILDINIG REPAIR CH
10	2	10	VEHICAL REPAIR
11	2	11	PURCHASE OF BOOKS
12	2	12	PURCHASE OF SCIE EQ

TABLE NAME : CON_EXP_DET;

Purpose: The purpose of this table is to keep the necessary information of a contingent_expences payment.

Key: SRN

COLUMN DESCRIPTION

Name	Null?	Type
SRN	NOT NULL	NUMBER (4)
CON_ID		NUMBER (4)
AMT		NUMBER (8)
CHECK_NO		NUMBER (8)
ACC_NO		NUMBER (8)
BANK		CHAR (20)
DT		DATE
PARTY		CHAR (20)
ACC_ID		NUMBER (4)

SAMPLE DATA

SRN	CON_ID	AMT	CH_NO	AC_NO	BANK	DATE	PARTY	ACC_ID
1	1	12000	12490	23456	HABIB	12-OCT-98	ELC CHAR	2
2	1	6700	2347	89076	HABIB	02-NOV-98	ELC CHAR	2
3	1	4500	12491	23456	HABIB	02-DEC-98	ELCT CHAR	2
6	2	3400	23456	23456	HABIB	12-OCT-98		2
7	2	6700	76890	23456	HABIB	23-NOV-98		1
16	4	1500	76543	32456	HABIB	02-AUG-98	MRS ASLAM	2
18	5	2400	65432	32456	HABIB	02-JAN-09	CANTT BOARD	3
20	7	1200	7654	23456	HABIB	03-MAR-99	MRS AKHTAR	3

TABLE NAME: OTHER_EXP;

Purpose: The purpose of this table is to keep the necessary information of a contegent_expences payment.

Key: OT_EXP_ID

COLUMN DESCRIPTION

Name	Null?	Type
SRN		NUMBER (6)
EXP_ID		NUMBER (4)
OT_EXP_ID	NOT NULL	NUMBER (6)
TYPE		CHAR (20)

SAMPLE DATA

SRN	EXP_ID	OT_EXP_ID	TYPE
1	3	1	MADELS
2	3	2	PRIZES
3	3	3	RECURSION

TABLE NAME: OTHER_EXP_DETAIL;

Purpose: The purpose of this table is to keep the necessary information of a other_expences payment.

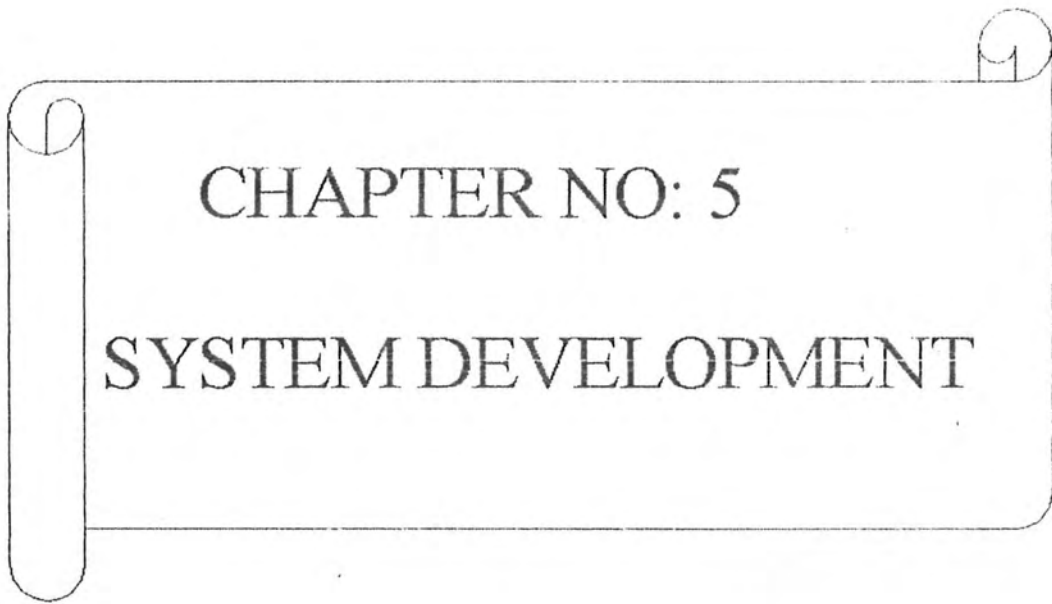
Key: SRN

COLUMN DESCRIPTION

Name	Null?	Type
SRN		NUMBER (4)
OT_EXP_ID		NUMBER (6)
AMT		NUMBER (8)
ACC_NO		NUMBER (8)
CHECK_NO		NUMBER (8)
BANK		CHAR (20)
DT		DATE
PARTY		CHAR (20)
ACC_ID		NUMBER (4)

SAMPLE DATA

SRN	OT_EXP_ID	AMT	AC_NO	CH_NO	BANK	DATE	PARTY	ACC_ID
1	1	1200	1234	23459	MCB	12-SEP-98	TAOQEER ZIA	2
3	2	670	1234	23478	MCB	31-MAR-99	ASLAM STAT	2
5	3	2300	1234	23459	MCB	9-APR-98		2



CHAPTER NO: 5

SYSTEM DEVELOPMENT

5.1 INTRODUCTION

The system development phase comes after the system design phase. It is more practical because it involves the realization of the required system. All the requirement specification and computer program are written and arrangements are to track the personnel.

5.2 DATABASE DEVELOPMENT

Before discussing the development of the system it is necessary to illustrate the terms used during the discussion.

5.2.1 FORMS

The main tool of the oracle utility used to develop the system are SQL forms are an arrangement of the information that determines how an application will work and how it will appear to the operators while using it. Although both the oracle utilities SQL*FORMS and SQL*PLUS may be used for data entry, modification, it is easier to implement them through SQL*FORMS. SQL*FORMS are used to design the interface of the system through an SQL*FORMS utility, called screen printer.

5.2.2 BLOCK

A form may contain one or more blocks. Each block may correspond to one of the base tables associated with the form. A block contains a group of related fields. There may be more than one block associated with a form.

5.2.3 BASE TABLE

Base table is database on which a block is based.

5.2.4 MASTER-DETAIL RELATIONSHIP

Master detail relationship may exist b/w blocks. When a form consists of more than one block. The master block displays records associated with detail records in the detail block. The detail block displays detail records associated with master records in the master block. So a master detail relationship exists when there are multiple records in the detail block corresponding to each record of master block or there is a primary and foreign key relationship B/W two fields.

5.2.5 SCREEN PRINTER

It is full screen editors, in which one can quickly move fields around, add boxes and other or changing the text displayed for a field.

5.2.6 TRIGGERS

Triggers are a solution of processing commends. All triggers are written in PL/SQL. Which is procedural language inter-related with oracle database. Trigger gives the strength of a programming language without the effect of learning one.

Trigger are associated with event points in SQL*FORMS processing. An event is an action, which occur when a form is activated. They can be defined on a field or a block or a form. An example of an event in the operator pressing the key {next field}
When this event occurs its associated trigger e.g. key NEXT FLD fires executing the command it contains.

5.3 INPUT LAYOUT FORM

1 INCOME FORM

DESCRIPTION

This form is used to keep the record of all type of the income of the School.

DETAIL

Block	Master Block	Table involved
Income		Income

2 GRANTT FORM

DESCRIPTION

This form is used to keep the record of the entire grant either by the Director or regional office or govt.

DETAIL

Block	Master Block	Table involved
Grant		Grant.

3 DONATION FORM

DESCRIPTION

This form is used to store or up date the record of donation, which is donated by various party to school at various time.

DETAIL

Block Donation	Master Block Donation detail	Table involved Donation, donation detail.
-------------------	---------------------------------	--

4 DUESS FORM

DESCRIPTION

School uses this form to keep the record of all the type of dues, which are granted.

DETAIL

Block Dues	Master Block	Table involved Dues.
---------------	--------------	-------------------------

5 PAYMENT FORM

DESCRIPTION

The student at each month uses this form to keep the record of the dues payment, which is deposit.

DETAIL

Block Payment	Master Block payment	Table involved student, Dues payment.
------------------	-------------------------	--

6 DEPOSIT FORM

DESCRIPTION

This form is used to keep the record of all the income of various head, which is deposit in the various banks under various accounts.

DETAIL

Block Deposit	Master Block Deposit	Table involved Deposit, income.
------------------	-------------------------	------------------------------------

7 EXPENCES FORM

DESCRIPTION

This form is used to keep the record of the expenses made by the school at the various time.

DETAIL

Block Expenses	Master block	Table involved expenses.
-------------------	--------------	-----------------------------

8 EMPLOYEE FORM

This form is used to keep the record in detail of the employee of the and their salary.

DETAIL

Block Salary	Master Block salary	Table involved employec, employee detail, salary.
-----------------	------------------------	--

9 CONTGENT EXPENCES FORM

DESCRIPTION

This form is used keep the record of the contingency expenses made by the school and their payment

DETAIL

Block Cont- exp - detail	Master Block cot-exp.det	Table involved contingency expenses Contingency Exp: detail
-----------------------------	-----------------------------	--

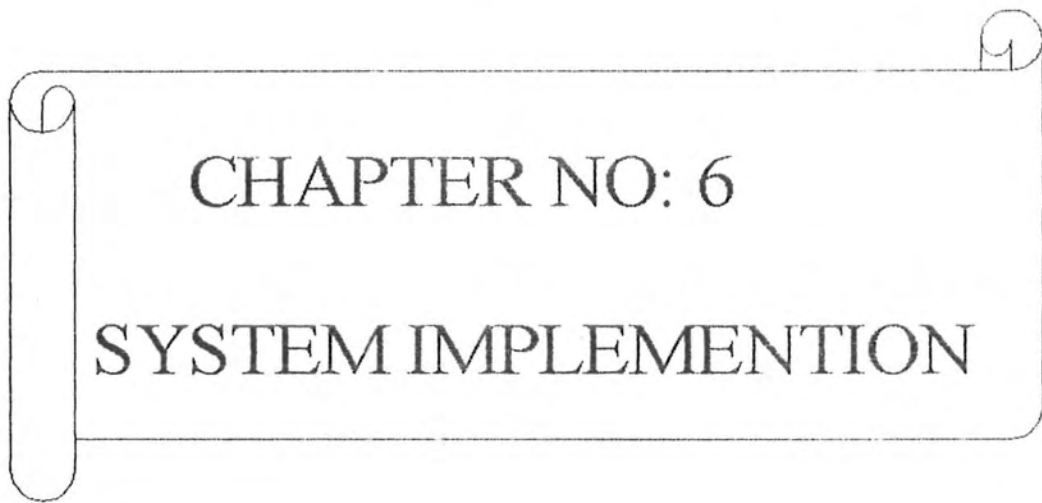
10 OTHER EXPENCES DETAIL FORM

DESCRIPTION

This form is used to keep the record of the other expenses made by the school

DETAIL

Block	Master Block	Table involved
Other- exp. detail	other --exp.detail	other-exp.otherexp.det



CHAPTER NO: 6

SYSTEM IMPLEMENTATION

6.1 INTRODUCTION

Implementation is the final phase in the system development life cycle. It starts at the beginning of the software development phase with a plan, known as implementation plan. During this phase, the developed system is put into actual operation. Thus the implementation details of the developed system are considered in this chapter.

6.2 SYSTEM TESTING

Testing is the process of executing a program, with the intent, of finding errors. Data is entered into the data base with the intent of determining, whether the system will process it correctly or not, the system testing is performed in the following three steps.

6.2.1 UNIT TESTING

In unit testing, different modules of the developed system are tested in dependent. The purpose of this testing is to determine that each undivided module is functioning properly and to locate logical and coding errors.

6.2.2 INTEGRATED TESTING

After testing the system on unit level combined testing of all modules is carried out the purpose is to determine that the modules are correctly interacting with each other. It also ensures that correct forms are invoked by different menu options, as they are developed separately from the application.

6.2.3 SYSTEM TESTING

System testing is performed to ensure, whether it is that is operating according to desired specifications and requirements, the main objective is to determine inconsistencies in the developed system. For example it is possible that in one module, reg-no may have been assigned an integer data type and in other module, it may have been given a data type.

6.3 CONVERSION

Conversion is the process replacing the old system with the new one. There are three different methods for system conversion and ensuring proper performance of the system.

6.3.1 PARALLEL CONVERSION

In this approach, both the new and the old systems, run side by side. It means that the user continues to use the old system, while he/she is learning to operate the new system. This is the safest approach, since in case of failure, the user may immediately turn back to old system, without any wastage of time and data. The failure may include the inability to handle certain transactions or could not understand certain type of processing errors.

6.3.2 DIRECT CONVERSION

In this approach the old system is immediately replaced with the new one. It requires carefully designed implementation plan. As soon as this plan is enforced, the old system is abandoned. There are no parallel activities going on side by side.

6.3.3 PILOT APPROACH

In this approach, the system is implemented in one particular area of the organization or the department. Thus the system is implemented in parts. The remaining departments or areas continue to work with the old system. The only advantage of this approach is that it provides sound basis for the whole system to install.

6.3.4 PROPOSED CONVERSION PLAN

After thorough analysis of the different approaches used for the system conversion, parallel conversion is recommended for the implementation of system developed. The arguments against parallel conversion are cost and extra load factors. From this point of view direct conversion is the best strategy for the system conversion. But in the event of the new system's failure the whole process will have to be repeated with disruption of going back to old system. In case of parallel conversion the

old system will be Available as the back up and results obtained through the new system can be compared To the out of the old system. This will permit changes and adjustment if required in the new system without disturbing information flow order.



CHAPTER NO: 7

SYSTEM EVELATION

7.1 INTRODUCTION

Finally the designer goes through the system evolution phase where he/she reviews the system to see whether the objectives of the system are accomplished or not. A major factor during system evolution is to evaluate the system with the perspective of the user because he/she will eventually be the one to use it. This is termed as devaluation of user Interface. Some of the measurable human factors which are central in evolution are ease of Use, rate of errors, speed of performance I-e how long does it take to carry out the bench mark set of tasks, subjective satisfaction I-e how many users like seeing different aspects of The system, and retention over time I-e how well does the user retain his/her knowledge. Every register likes to succeed in very category but he/she's used to face tradeoffs e.g. if rate of errors is to be kept extremely low, then the speed of performance may have to be sacrificed. All the above-mentioned factors do not guarantee unique interface and there is, always room for improvement. In developing the propose system, all these factors were kept in Mind, but as mentioned earlier, one has to do away with some factors, so the merits of the System are accompanied by some demerits too.

7.2 MERITS OF THE SYSTEM

The merits of the system are discussed below

1: EFFICIENCY

Data retrieval was one of man problems encountered at the and section because in order to locate particular students record, it took considerable time to go through the huge registers. The development of computerized system gave way to on-line information retrieval and storage of data.

2 REDUCTION RATES OF ERRORS

In the newly developed system, rate of errors is considerably reduced since form Are used for input, updating etc,so to reduce errors the user has at his disposal Only what needs, appropriate error message have been provided to prompt the user and refrain him/her from making errors.

3: ACCURCY

Data validation checks have been provided to ensure correct storage of information.

4: EFFICIENT EXPLORATION OF DATA BASE

Queries often make a system more inefficient. Exploration of database Queries often make a system more interesting so, along with the data entry, the operator can enter a query criterion for exploration of database. These queries are syntax free and only a query Criterion i.e. value has to entered in field which results in retrieval of Desired information.

5 LISTS OF VALUES

A list of values is provided needed so that the user does not need to Remember entries already made. A single keystroke pops up a list and the user can browse and select a desired value.

6: BETTER RESPONSE TIME

The field on which search is to be made are indexed in order to reduced Response time for the generation of a query or a report or any other on line Information.

7 PHYSICAL AND LOGICAL DATA INDEPENDENCE OF SOFTWARE

Physical data independence is the separation of the way data is physically stored, from the arrangement of the data as presented to user so, if the physical Storage of data changes there is no need to modify the application oracle's facility of indexing help in this respect. Logical data independence results From the arbitrary order of columns and rows in a table one finds a column By its more and row by the value of its primary key, even though the order Of columns and rows in a table are changed, a query on that table will be respective of order.

8 SYSTEM SECURITIES

First there is an operating system user name and a pass ward required To long in to system further to gain access to oracle, users name and pass ward are also required, This is done to provide maximum security to the system

9 DEVICE INDEPENDENCE

While continuing to operate efficiently, the system can be changed over from one environment to another. The program is executable in case, a different operating system is used.

10 MODULAR APPROACHES

The whole system is implemented by designing different modules to perform Different tasks with the help of modular approach during software development, Significant advantage of design simplicity and operational efficiency has been Obtained developed system can, there fore be extended or modified easily.

7.3 DEMERITS OF THE SYSTEM

During design and development phase every possible effort was made to overcome the deficiencies of the system but in spite of this, there may Be more room for improvement. The system has been developed in the Unix based oracle. Since UNIX does not provide user-friendly interfaces, they're fore its some times difficult to crash or getting corrupt if proper system maintains and management is not done. The system will allow destruction of files as well As a part the system itself, if care is not exercised. Due to these reasons new users are to be trained well before they use the system.

7.4 FUTURE PRECAUTIONS AND RECOMMENDATIONS

A regular schedule for data base back up should be followed to avoid problems causing from system break down the oracle utility Exp (export) should be used for this purpose. A part from students Acc/ Receivable project there are many other project related to the schools account. There is certainly a need of integrating them, so that instead of each system working independently all applications of each system can share each other data so as to minimize redundancies. The related projects are A/c payable system, Budged, Estimation system ledger Book, Maintains system, which have been tested indecently of each other and need to be integrated and subsequently tested. As mentioned earlier that SQL*FORM allow one to build custom designed forms which at any time can be enhanced so, it is certainly recommended that the user of this system should under stand the system (the working and the logic behind it), so that in future, if there arise a need for future improvement or change Instead of building new application, one might build upon the existing application.



CHAPTER NO: 8

USER GUIDE

8.1 INTRODUCTION

This guide has been organized to explain the working of "student Account, Receivable system", developed for F.G BOYS PUBLIC SCHOOL PANO AQIL CANTT. It discusses the different operations that could be performed on a database, such as insertion, Deletion and Modification etc. The information is retrieved from the database, only in the form of queries and reports.

8.2 GETTING STARTED

To start the system, type SQL.MENUES USER NAME/ PASS WORD and press <Return> Key and then execute PNL CANTT (menu name), after a few seconds, screen displays, which is the main Menu screen.

8.3 PULL DOWN MENU

When we select any of the option from the main Menu screen, by moving the bar on the desired option, with the help of <Up Arrow> key, <Down Arrow> key, <Right Arrow> key and <Left Arrow> key, pressing the <Return> key, we will find that it opens like a list. This is called a pull down menu.

8.4 FORM LAYOUT

Various form layouts are used to enter and retrieve data from the database. Thus they form the basis for under consideration database.

8.5 EDITING FIELD

An editing field is a base unit in the form Designing, with the help of it only a form layout is able to stored and is able to store and retrieve data from the database. In other words, these are the places, where we can enter or retrieve Data form.

8.6 STATUS LINE

The status line is a line on the screen, where SQL*Forms display information about its current status It is usually the last line on the screen. It usually contain (, which indicates that the beginning of the current field is scrolled off the left side of the screen) indicates that the end of the current field is scrolled off the right side of the screen.

CHAR MODE,

PAGE Which indicates whether in inserter replace made.

Count Which indicate the form page currently displayed.

Indicates the number of records retrieved.

8.7 MESSAGE LINE

The message line is where SQL*Forms display messages or provides additional help. It is usually the last line on the data entry screen of particular form layout.

8.8 RECORD MANIPULATION

The following operation can be performed on a record.

- Add Record.
- Delete Record.
- Modify or change Record.
- Retrieve Record.

8.9 DATABASE OPERATIONS

8.9.1 ADD OPERATION

If user needs to enter a new record that does not exist in the database then user must go through the following procedure. The form for which he /she wants to inserts a record is already displayed by selecting the appropriate option.

Press <create Record> key which can be seen by pressing <ctrl-k>key.

ENTER new data in the editing fields

When data entry is completed, press <Down Arrow> key to some the record into workspace, before saving it to the database. If you want to insert another record, press again the <create Record> Key.

Finally pressing <commit> Key to store the changes to the database

Press <Exit> key to escape.

If you try to insert a record with the same primary key the system will generate an appropriate warning for it preventing the operator from doing so.

8.9.2 RETRIEVE OPERATION

There are two options available for retrieving a particular record, which is discussed below.

8.9.2.1 Display all Records

The form for which we want to retrieve a record is already display

Press <Execute Query> key

First record is displayed, keep on pressing the <Next Record> key. Unit records form the database is retrieved.

Press <Exit >key to escape.

8.9.2.2 Display specific Record

The form for which we want to retrieve records is already displayed.

Press < Enter Query> key

Enter appropriate values in the displayed editing fields, which are to be used in performing a particular search. It may be single field or more than one fields

First records is displayed, keep on pressing the <Next Record> key, until records from the database are retrieved

Press <Exit> key to escape

Note that if we try to retrieve records that do not exist in the database the system will generate and appropriate message conveying that corresponding record does not exist in the database.

8.9.3 DELETION OPERATION

To delete a record that we have fetched or committed previously, the following procedure is adopted.

The form for which we want to delete record is already displayed by selecting this option. Keeping the cursor in the first field of the form, press <Execute Query> key, untill the desired record appears. Press the <Delete record> key. This records will be displayed only from the workspace if we want to delete another records, repeat the above process from the Very first step.

To delete records permanently from the database, press <commit key>
Press <Exit> key to escape.

Note that if try to delete a records that does not exit on the database the system will generate an appropriate message, conveying that the corresponding does not exit in the database.

8.9.4 MODIFY / CHANGE

To modify a record that we have fetched or committed privously, the following procedure is adopted.

The form for which we want to modify record is already displayed by selecting this option.

Press <Enter Query> key.

Enter appropriate values in the displayed editing fields, which are to be used in performing a particular search. It may be a single field or more than one fields.

Press <Execute Query> key, first record is displayed, keep on pressing the <Next Record> key, until the desired records appears.

Enter new data in the displayed editing fields whose value needs to be change. After data entry is completed, press <Down Arrow> key to save the records into the workspace, before saving it to the database.

If we want to modify another records respect the above process again, from the very

First step.

Finally press the <commit>key to store the change to the database.

Press <Exit> key to escape.

8.10 RECORD LOCKING

SQL*FORMS provide automatic record locking. If another user is updating or deleting a record from the database and has not yet committed the changes to the database SQL*FORMS tell the user that it is waiting for that person to make the changes permanent.

In the mean time, if we try to access the same record, our access is denied.

Thus at a letter time, we may try to fetch the same record again.

8.11 SEARCH ENGINE

When we perform a particular search. SQL*FORMS fetches all the records the table associated with the current block and displays

them on screen, usually one at a time. The following four steps are generally invalid in performing a particular search.

Initiating the query.

Entering the search criteria

Executing the query

Fetching the subsequent records

8.12 QUERY GENERATION

Selecting the query option from the main menu screen results in the submenu is selecting the required query by moving with <Up Arrow> key and pressing <Return> key at desired query will produce the required results in printing form as well as on screen.

Explanation

GRANT DETAIL Report

Selecting this option, the grant detail report of the school is displayed.

DONATION DETAIL REPORT

Selecting this option, donation denoted to the e school is displayed.

MONTHLY SALARY REPORT

Selecting this option the monthly salary report of all the employee of the school is displayed.

CONTEGENT EXPENCES REPORT

Selecting this option thecontegent expences of the school is displayed.

EMPLOYEE SALARY REPORT

Selecting this option, the employee salary report of the employee of the school is displayed.

STUDENT DUES REPORT

Selecting this option, the dues deposited by the students to the school is displayed.

8.14 SECURITY IMPLEMENTATION

The oracle owner requires DBA privileges, in order to create shut down startup and connect internal to the database. Making this account a member of the DBA group, automatically gives to him/her these privileges. When we access the SQL*DBA, it look for the group membership of our account .If it is the DBA group, then it grants access to the system privileges functions. If not, then we can access only the monitoring and querying functions of

SQL*DBA.

To ensure the security of the system different user groups must be created by system Administrator. Groups are usually controlled by the file/etc/group. Thus before installing oracle, we must create a Database Administrator Group (DBA) and assign the report and oracle user-ids to this group. The SQL*DBA system commands are then automatically assigned to the DBA group, upon installation.

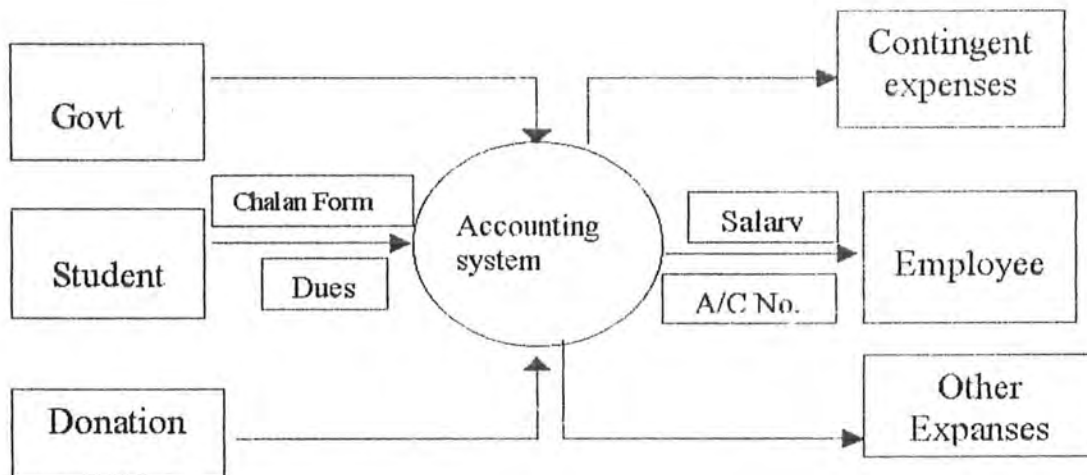
8.15 SPECIAL CONSIDERATIONS

The system has been developed in UNIX based oracle, which is for more complicated, then any other operating system. Thus the user must have a sound knowledge of UNIX, before using this system.

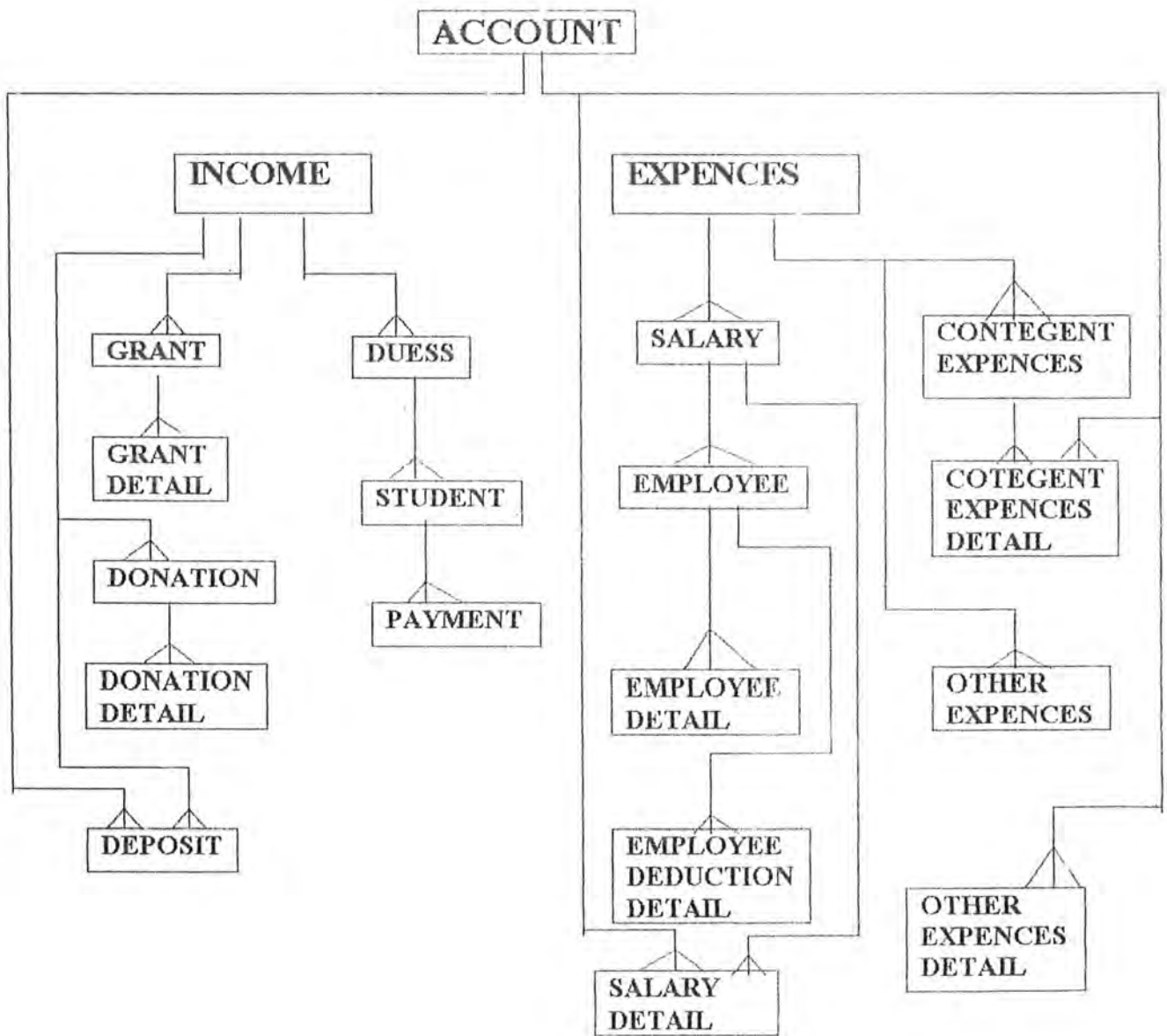
Every user must have a long -in account and password assigned to him/her by the system Administrator. Then only he/she has the authority to create new user. Another important point is that the system should be carefully shut down. The oracle system should be dismounted and the root password be given before switching off the system, otherwise the system might get, corcept, which may either result in loss of data or in consistent

APPENDIX

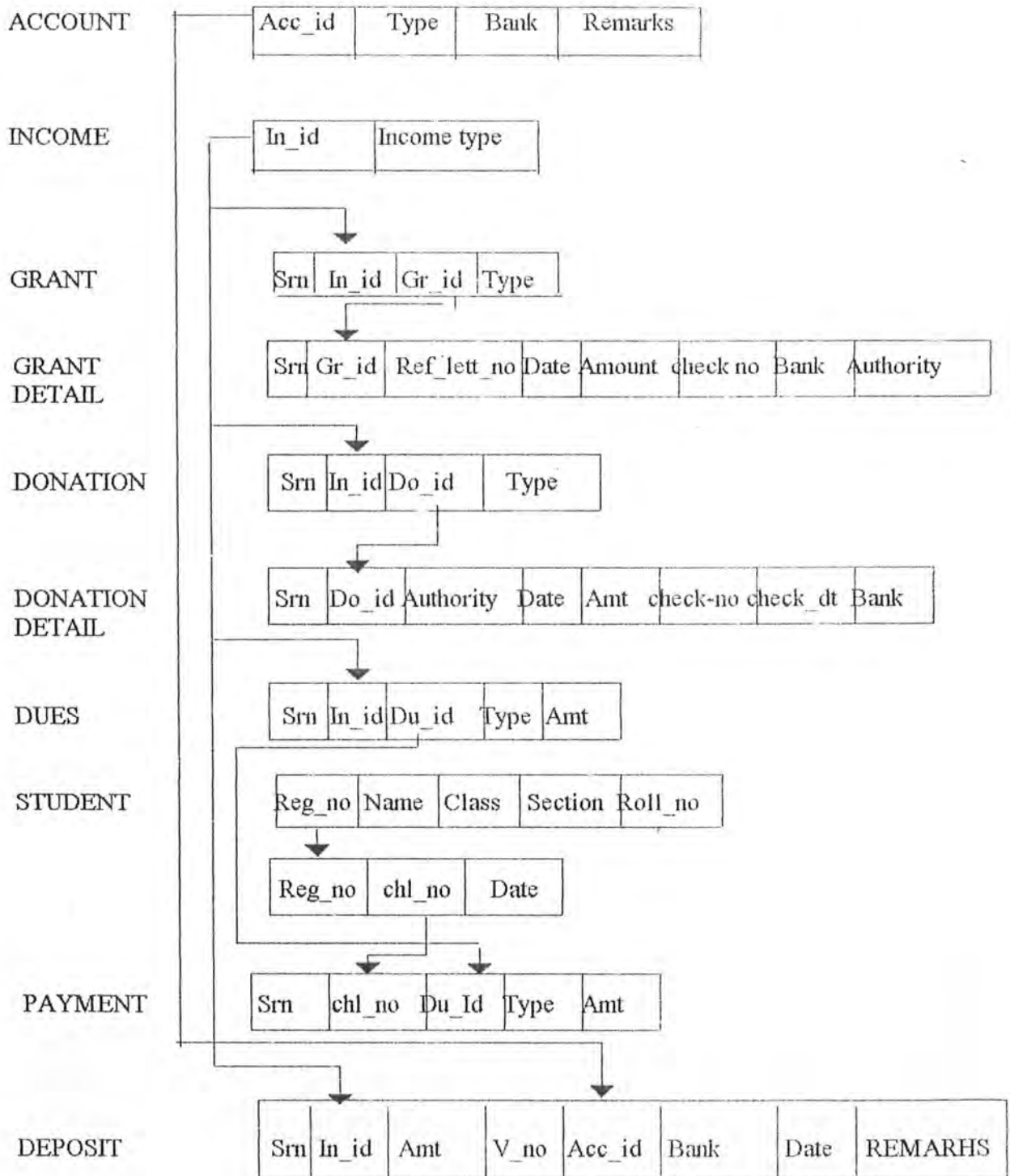
DATA FLOW DIAGRAM (0 LEVEL)



ENTITY RELATION DIAGRAM



BACHMANN DIAGRAM



EXPENCES A

Srn	Exp_id	Type
-----	--------	------

SALARY

Sr	Exp_id	Sal_id	Type
----	--------	--------	------

EMPLOYEE

Srn	Sal_id	Emp_id	Name	Designatio	Type
-----	--------	--------	------	------------	------

EMP_DETAIL

Srn	Emp_id	Basic_pay	H/R	M/A	C/A	SP/A	OTH/A
-----	--------	-----------	-----	-----	-----	------	-------

EMP_DE-DETAIL

Emp_id	G/P	GR/IN	B/F	HB/A	CON/A	GP/A	TOTAL
--------	-----	-------	-----	------	-------	------	-------

SALARY DETAIL

Sal_id	Emp_id	Amt	Check-no	Acc_id	BANK	DATE
--------	--------	-----	----------	--------	------	------

CONT

Srn	Exp_id	Con_id	Type
-----	--------	--------	------

CONT DETA

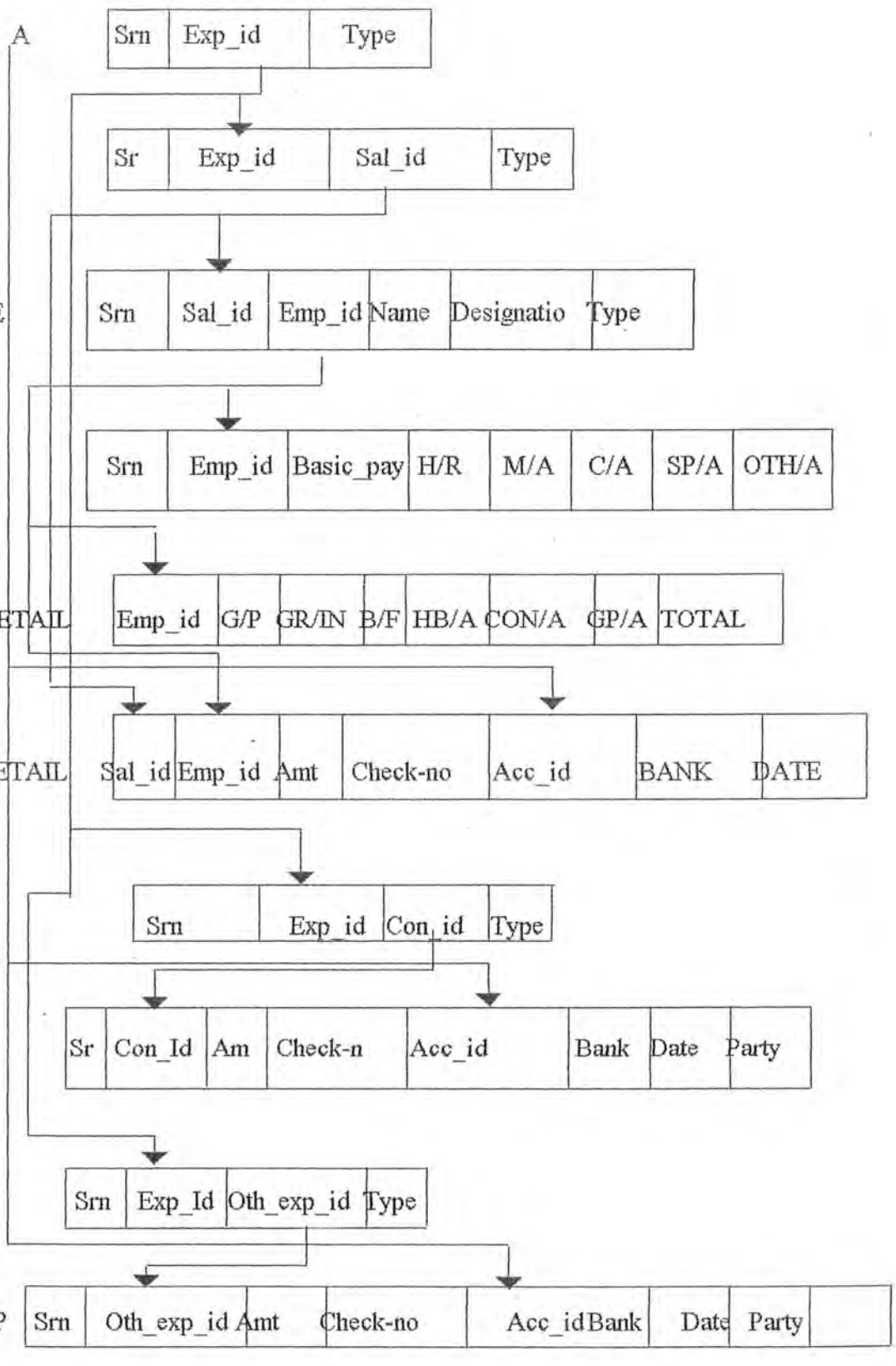
Sr	Con_Id	Am	Check-n	Acc_id	Bank	Date	Party
----	--------	----	---------	--------	------	------	-------

OTHE EXP

Srn	Exp_Id	Oth_exp_id	Type
-----	--------	------------	------

OTHER EXP DETAIL

Srn	Oth_exp_id	Amt	Check-no	Acc_id	Bank	Date	Party
-----	------------	-----	----------	--------	------	------	-------



FORMS
LAYOUT

The screenshot shows a form builder window with a dark background. At the top, a white rounded rectangle contains the text "MASTER DETAIL FORMS". Below this, there is a list of six items, each consisting of a white rounded rectangle with a number inside, followed by a white rounded rectangle with text. The items are:

- 1 GRANT, GRANT_DETAIL
- 2 STUDENT, CHALLENGE, PAYMENT
- 3 DONATION, DONATION_DETAIL
- 4 EMPLOYEE, EMP_DETAIL, EMP_DEDUCTION_DETAIL, EMP_SALARY
- 5 CONT_EXP, CONT_EXP_DETAIL
- 6 OTHER_EXP, OTHER_EXP_DETAIL

The interface includes a vertical toolbar on the left with various icons, a horizontal ruler at the top with numerical markings, and a status bar at the bottom.

GRANT

In Id Gr Id Type

1	1	GOVERNMENT
---	---	------------

GRANT DETAIL

Sm Re Lett Ndt Amt Check No Bank Authority Acc No

1	1235	01-FEB-9	120000	5432	HABIB	GOVT	12987
2	5432	04-FEB-9	500000	76543	HABIB	GOVT	5643
3	5467	05-JUN-0	50000	76500	HABIB	GOVT	76540
4	98765	09-DEC-0	250000	765400	HABIB	GOVT	876500
5	87699	08-AUG-0	45000	76549	HABIB	GOVT	76542

EXIT	<	>	BACK	Query	Save
------	---	---	------	-------	------

Enter value for: IN_ID

Record 1/2

STUDENT

Reg No	Name	Class	Section	Roll No
101	MUNIR HUSSAIN	10TH	A	1

CHALLENGE

Chl No	Dt
1	01-JAN-02

PAYMENT

Sm	Du Id	Type	Am
1	1	ADMISSION FEE	150
2	2	TUTION FEE	200
3	3	SLC FEE	100
4	4	SCIENCE FEE	50
5	5	STUDENT FUND	50
6	6	SPORT FUND	50
7	7	BUILDING FUND	50
8	8	LIBRARY FUND	40
9	9	SCIENCE FUND	100
10	10	ABSENT FINE	10
TOTAL			900

DOUBLE CLICK FOR TOT

DONATION

In Id Do Id Type

2	1	FINNANCIAL
---	---	------------

DONATION_DETAIL

Srn Authority Dt Amt Check No Check Dt Acc No Bank Type

1	MISS SHAZIA	01-DEC-98	25000	12345	01-DEC-9	43209	UNION	FINAC
2	MR TAHIR HUSS	12-NOV-98	40000	432167	12-NOV-9	765000	ASKAR	FINAN
3	MR TANVEER H	23-OCT-98	45000	32111	23-OCT-9	43217	NATIO	FINANC
4	MISS ANELA	03-FEB-99	4500	34567	03-FEB-9	32100	FIRST	FINANC

EXIT

<

>

BACK

Query

Save

Enter value for: IN_ID

Record: 1/7



Developer/20...

Developer/2...



2:52 PM

EMPLOYEE

Month

JAN/2000

Srn	Sal Id	Emp Id	Name	Desg	Type
11	3	11	MUNIR HUSSAIN	T.G.T	PERMANENT

EMP_DETAIL

EMP_DED_DETAIL

Srn	11
Basic Pay	6450
House Rent	844
Ma Allow	640
Conv Allow	640
Spe Allow	200
Oth Allow	1500
Tot	10274

Srn	11
Gp Fund	640
Gr In	120
Benv Fund	50
Hb Adv	0
Conv Adv	0
Gp Fund Ad	0
Ded Tot	810

Net Pay **9464**

Save

Query

NEXT

PREVIOUS

EXIT

BACK



CONTEGENT_EXP

Srn	Exp Id	Con Id	Type
1	2	1	ELECTRICTY

CON_EXP_DET

Srn	Amt	Check No	Acc No	Bank	Dt	Party
1	12000	12490	23456	HABIB	12-OCT-	ELECT CHARGE
2	6700	2347	89076	HABIB	02-NOV-	ELECT CHARGE
3	4500	12491	23456	HABIB	02-DEC-	ELECT CHARGE
4	4800	12456	23456	HABIB	08-JAN-	ELECT CHARGE
5	5500	12490	23456	HABIB	09-FEB-	ELECT CHARGE



EXIT	<	>	BACK	Query	Save
------	---	---	------	-------	------

OTH_EXP

Srn Exp Id Ot Exp Id Type

1	3	1	MADELS
---	---	---	--------

OTH_EXP_DET

Srn Amt Acc No Check No Bank Dt Party Acc Id

1	1200	1234	23459	MCB	12-SEP	TAOQEER ZI	2
2	1200	1234	23490	MCB	12-SEP	TAOQEER ZI	2



EXIT < > BACK Query Save

STUDENT DUES REPORT

Chl N	1	Du Id Type		Amt
Name	MUNIR HUSSAIN	1	ADMISSION FEE	150
		2	TUTION FEE	200
Clas	10TH	3	SLC FEE	100
		4	SCIENCE FEE	50
Roll No	1	5	STUDENT FUND	50
		6	SPORT FUND	50
Reg No	101	7	BUILDING FUND	50
		8	LIBRARY FUND	40
Section	A	9	SCIENCE FUND	100
		10	ABSENT FINE	10
DATE	01-JAN-02	13	FURNITURE FUND	100

Chl N	2	Du Id Type		Amt
Name	TAHIR HUSSAIN	1	ADMISSION FEE	150
		2	TUTION FEE	200
Clas	10TH	3	SLC FEE	150
		4	SCIENCE FEE	50
Roll No	2	5	STUDENT FUND	50
		6	SPORT FUND	50
		7	BUILDING FUND	50

EMPLOYEE SALARY REPORT

Sl. No.	Emp. Id	Name	Desig.	Type	Month	Tot	Ded Tot	Net Pav
1	1	CH ANDUL KHALIQ	PRINCIPAL	PERMANENT	JAN/2000	14980	1830	13150
					FEB/2000	14980	1830	13150
2	2	KHAN BALOCH	VOICE PRIN	PERMANENT	JAN/2000	12300	1830	10550
					FEB/2000	12300	1830	10550
3	3	GHULAM HUSSAIN	T.G.T	PERMANENT	JAN/2000	10574	810	9764
					FEB/2000	10574	810	9764
4	3	CH ARSHAD	T.G.T	PERMANENT	JAN/2000	10034	810	9224
					FEB/2000	10034	810	9224
5	3	CH YOUSF	T.G.T	PERMANENT	JAN/2000	8599	810	7789
					FEB/2000	8599	810	7789

GRANT DETAIL REPORT

Ln	Bill Type	Authority	Acc No	Check No	Amt	BANK	DATE	Re Lett
1	GOVERNMENT	GOVT	12987	5432	120000	HABIB	01-FEB-98	1235
1	GOVERNMENT	GOVT	5643	76543	500000	HABIB	04-FEB-99	5432
1	GOVERNMENT	GOVT	76540	76500	50000	HABIB	05-JUN-00	5467
1	GOVERNMENT	GOVT	876500	765400	250000	HABIB	09-DEC-01	98765
1	GOVERNMENT	GOVT	76542	76549	45000	HABIB	08-AUG-02	87699
2	DIRECTORATE	DIRECTOR	54321	76589	30000	NATIONAL	01-JUL-98	5678
2	DIRECTORATE	DIRECTOR	76549	76589	500000	NATIONAL	01-JUL-99	54678
2	DIRECTORATE	DIRECTOR	76543	87653	500000	NATIONAL	01-JUL-00	65789
2	DIRECTORATE	DIRECTOR	76111	76543	500000	NATIONAL	01-JUL-01	65438
2	DIRECTORATE	DIRECTOR	76549	876543	500000	NATIONAL	01-JUL-02	76511
3	REGIONAL OFI	GSO-1	87600	87659	20000	MCB	01-JUL-98	87699
3	REGIONAL OFI	GSO-1	65000	76654	50000	MCB	01-DEC-99	543222
3	REGIONAL OFI	GSO-1	765411	76543	65000	MCB	01-AUG-00	543321

CONTEGENT EXPENCES REPORT

Srn	Con Id	Amt	check No	Acc No	Bank	DATE	Party	Acc Id
1	1	12000	12490	23456	HABIB	12-OCT-98	ELECT CHARGES	2
2	1	8700	2347	89076	HABIB	02-NOV-98	ELECT CHARGES	2
3	1	4500	12491	23456	HABIB	02-DEC-98	ELECT CHARGES	2
4	1	4800	12456	23456	HABIB	08-JAN-99	ELECT CHARGES	2
5	1	9500	12490	23456	HABIB	09-FEB-00	ELECT CHARGES	2
6	2	3400	23456	23456	HABIB	12-OCT-98		2
7	2	8700	76890	23456	HABIB	23-NOV-98		1
8	2	8700	8798	23456	HABIB	12-DEC-98		1
9	2	6500	8765	23456	HABIB	02-JAN-99		1
10	2	6500	7654	32456	HABIB	09-FEB-00		1
11	3	2200	12345	32456	HABIB	02-OCT-98		1
12	3	2100	32467	32456	HABIB	09-NOV-98		1
13	3	4500	9876	32456	HABIB	12-DEC-98		1
14	3	980	9876	32456	HABIB	24-JAN-99		2
15	3	678	9879	32456	HABIB	12-FEB-99		3
16	4	1500	76543	32456	HABIB	02-AUG-98	MRS ASLAM	2

DONATION DETAIL REPORT

Sl. No.	Authority	amt	Acc No	Check No	Check Dt	Bank	Dt	
1	FINANC	MISS SHAZIA	25000	43209	12345	01-DEC-98	UNION BANK	01-DEC-98
2	FINANC	MR TAHIR MUSSAIN	40000	765000	432167	12-NOV-98	ASKARI	12-NOV-98
3	FINANC	MR TANVEER HUSSAIN	45000	43217	32111	23-OCT-98	NATIONAL	23-OCT-98
4	FINANC	MISS ANELA	4500	32100	34567	03-FEB-99	FIRST WOME	03-FEB-99
5	COMPUTER	MISS FERZANA	0	0	0	23-DEC-98	0	12-DEC-98
6	COMPUTER	MIR ZUBAIR	0		0	12-MAR-99	0	12-MAR-99
7	SOF'S SET	MRS UMAIR						23-APR-00
8	CONST ROOM	MRS REHMAT VLLAK						12-MAY-01
9	COMPUTER	GUL MUHAMMAD						23-FEB-02

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